

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 21. (cancelled)

22. (new) A process for the production of a synthetic resin composite material with a polyurethane gel coat, wherein the process comprises

(i) mixing a polyol component (A) and a polyisocyanate component (B) and at least partially curing the resultant mixture to form a gel coat material; and

(ii) contacting the gel coat material with a synthetic resin that comprises at least one of an epoxy resin and a vinyl ester resin, the synthetic resin being not, or at least not completely cured at the time it is contacted with the gel coat material;

and wherein

polyol component (A) is a mixture that comprises (i) one or more polyols and (ii) one or more aromatic amines, and comprises from 0.5 to 10 mol of hydroxyl groups per kg of component (A); and polyisocyanate component (B) comprises one or more aromatic polyisocyanates.

23. (new) The process of claim 22, wherein the gel coat material displays an elongation at break at 23°C, measured according to DIN EN ISO 527, of at least 3%.

24. (new) The process of claim 22, wherein the polyurethane gel coat material is not completely cured at the time it is contacted with the synthetic resin.

25. (new) The process of claim 24, wherein the synthetic resin is applied onto the polyurethane gel coat material.

26. (new) The process of claim 22, wherein the synthetic resin comprises one or more reinforcing materials.

27. (new) The process of claim 26, wherein the one or more reinforcing materials comprise one of more of a glass fiber fabric, a glass fiber nonwoven, a carbon fiber fabric, and a carbon fiber bonded fabric.

28. (new) The process of claim 22, wherein component (A)(i) comprises one or more polyether polyols.

29. (new) The process of claim 22, wherein component (A)(i) comprises at least one of (A1) one or more low molecular weight polyols having a molecular weight of from 150 to 600 g/mol and from 4 to 20 mol of hydroxyl groups per kg of low molecular weight polyol(s), and (A2) one or more higher molecular weight polyols.

30. (new) The process of claim 22, wherein an aromatic amine of component (A)(ii), as a 20 wt.% solution in toluene, mixed at 23°C with an equimolar quantity of an

oligomeric HDI isocyanate having an NCO content of about 5.2 mol/kg and a viscosity of from 2,750 to 4,250 mPas, as a 80 wt.% solution in toluene, affords a gel time, determined according to E-DIN VDE 0291-2, 1997-06, section 9.2.1., of more than 30 seconds.

31. (new) The process of claim 22, wherein the one or more aromatic amines of component (A)(ii) comprise at least one methylenebisaniiline.

32. (new) The process of claim 31, wherein the at least one methylenebisaniiline comprises 4,4'-methylenebis-(3-chloro-2,6-diethylaniline).

33. (new) The process of claim 22, wherein component (A) comprises from 0.1 to 20 wt.% of the one or more aromatic amines, based on a total weight of components (A)(i) and (A)(ii).

34. (new) The process of claim 29, wherein component (A) comprises from 2 to 70 wt.% of component (A1), based on a total weight of components (A)(i) and (A)(ii).

35. (new) The process of claim 34, wherein component (A) comprises from 5 to 60 wt.% of component (A1).

36. (new) The process of claim 29, wherein component (A1) comprises from 4.5 to 15 mol of hydroxyl groups of per kg of component (A1).

37. (new) The process of claim 29, wherein component (A1) comprises one or more polyols selected from straight-chain and branched polyester polyols, polyether polyols, acrylate polyols, and polyols based on dimeric fatty acids.

38. (new) The process of claim 29, wherein component (A2) comprises one or more polyols selected from polyester polyols, polyether polyols, acrylate polyols, and polyols based on dimeric fatty acids.

39. (new) The process of claim 29, wherein component (A) comprises from 75 to 10 wt. % of component (A2), based on a total weight of components (A)(i) and (A)(ii).

40. (new) The process of claim 22, wherein polyisocyanate component (B) comprises one or more of a monomeric, oligomeric or polymeric polyisocyanate.

41. (new) A synthetic resin composite material with a polyurethane gel coat, wherein the composite material is obtained by the process of claim 22.

42. (new) The composite material of claim 41, wherein the composite material is in a form of a rotor vane for a wind power plant, or a part thereof.

43. (new) A process for the production of a synthetic resin composite material with a polyurethane gel coat, wherein the process comprises

(i) forming a gel coat material by mixing a polyol component (A) and a polyisocyanate component (B) and, optionally, partially curing the resultant mixture; and

(ii) applying onto the gel coat material a synthetic resin that comprises at least one of an epoxy resin and a vinyl ester resin, the synthetic resin being not, or at least not completely cured at the time it is applied onto the gel coat material;

and wherein

polyol component (A) is a mixture that comprises (i) one or more polyols and (ii) one or more aromatic amines, and comprises from 0.5 to 10 mol of hydroxyl groups per kg of component (A); and polyisocyanate component (B) comprises one or more aromatic polyisocyanates.